

alkoxy-carbonylamino, (C₁-C₆)-alkoxy, carboxyl, (C₁-C₈)-alkoxy-carbonyl, straight-chain or branched (C₁-C₆)-alkyl which is substituted by one or more fluorine atoms, hydroxyl, straight-chain or branched (C₁-C₈)-alkoxy, where adjacent oxygen atoms can also be linked by (C₁-C₂)-alkylene groups, benzyloxy, nitro, amino, mono-(C₁-C₄)-alkylamino, di-(C₁-C₄)-alkylamino, aryl, which can be unsubstituted or mono- or polysubstituted by identical or different substituents from the group consisting of straight-chain or branched (C₁-C₈)-alkyl, (C₃-C₇)-cycloalkyl, carboxyl, straight-chain or branched (C₁-C₈)-alkoxy-carbonyl, by trifluoromethyl, hydroxyl, straight-chain or branched (C₁-C₈)-alkoxy, benzyloxy, nitro, amino, mono-(C₁-C₄)-alkylamino, di-(C₁-C₄)-alkylamino, cyano, straight-chain or branched cyano-(C₁-C₆)-alkyl; and their structural isomers and stereoisomers, and their pharmaceutically acceptable salts.--

Delete claim 12.

REMARKS

Claims 1-11 and 13-14 are in the application.

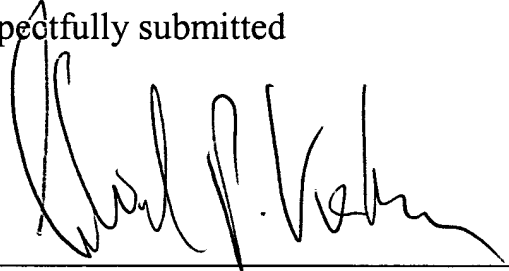
Claim 1 was amended to correct a number of informalities. Claim 12 to the therapeutic process was deleted. A claim comparison page is attached.

It is respectfully submitted that the compound of Example 11 of Sugihara et al. is a 3,4,5-trimethoxybenzyl compound, and such a substitution is not possible for R₄ of the present invention which is a "straight-chain or branched (C₁-C₂₀)-alkyl

radical which can be saturated or unsaturated, with one to three double and/or triple bonds.”

In view of the foregoing, a reconsideration of the outstanding rejections, and the allowance of claims 1-11 and 13-14 are respectfully urged.

Respectfully submitted

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Gabriel P. Katona, their attorney

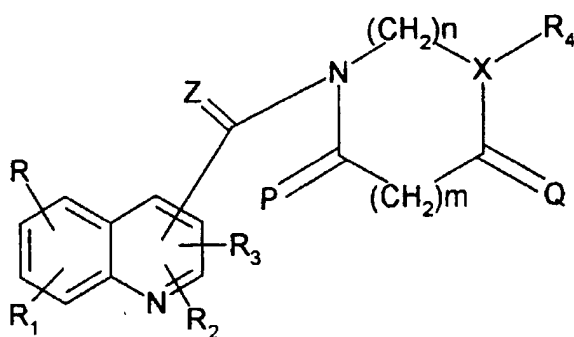
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Claim comparison page

Quinoline derivatives according to the formula 1



formula 1

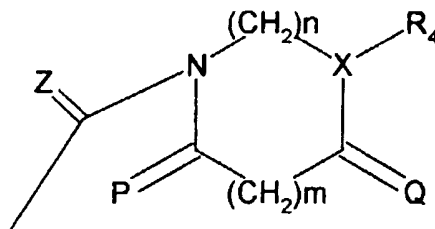
in which

R, R₁, R₂, R₃ can [**may**] be attached to any of the quinoline carbon atoms C₂ to C₈, are identical or different and independently of one another denote hydrogen, straight-chain or branched (C₁-C₈)-alkyl, (C₃-C₇)-cycloalkyl, straight-chain or branched (C₁-C₈)-alkylcarbonyl, [**preferably acetyl,**] straight-chain or branched (C₁-C₈)-alkoxy, halogen, aryl-(C₁-C₈)-alkoxy, [**preferably benzyloxy or phenylethyloxy**] nitro, amino, mono-(C₁-C₄)-alkylamino, di-(C₁-C₄)-alkylamino, (C₁-C₈)-alkoxycarbonylamino, (C₁-C₆)-alkoxycarbonylamino-(C₁-C₈)-alkyl, cyano, straight-chain or branched cyano-(C₁-C₆)-alkyl, carboxyl, (C₁-C₈)-alkoxycarbonyl, (C₁-C₄)-alkyl which is substituted by one or more fluorine atoms, [**preferably the trifluoromethyl group,**] carboxy-(C₁-C₈)-alkyl or (C₁-C₈)-alkoxycarbonyl-(C₁-C₆)-alkyl, (C₂-C₆)-alkenyl, [**preferably allyl,**] (C₂-C₆)-alkynyl, [**preferably ethynyl or propargyl**] straight-chain or branched cyano-(C₁-C₆)-alkyl, [**preferably cyanomethyl**] aryl, where the aryl radical can [**may**] be unsubstituted or mono- or polysubstituted by identical or different substituents from the group consisting of halogen, straight-chain or branched (C₁-C₈)-alkyl, (C₃-C₇)-cycloalkyl, carboxyl, straight-chain or branched (C₁-C₈)-alkoxycarbonyl, [**preferably tert-**

butoxycarbonyl,] by trifluoromethyl, hydroxyl, straight-chain or branched (C₁-C₈)-alkoxy, [**preferably methoxy or ethoxy,**] benzyloxy, nitro, amino, mono-(C₁-C₄)-alkylamino, di-(C₁-C₄)-alkylamino, cyano, straight-chain or branched cyano-(C₁-C₆)-alkyl, where additionally R and R₁ or R₂ and R₃ can [**may**] form a fused aromatic 6-membered ring with the quinoline ring forming an acridine ring which for its part can [**may**] be substituted at any C atom ring position by the radicals R, R₁, R₂ and R₃ having the meanings mentioned above;

P and Q are each 2 hydrogen atoms,

Z is oxygen or sulfur, where the radical



substituted on the quinoline heterocycle can [**may**] be attached to C atoms C₂-C₈ of the quinoline ring skeleton;

X is nitrogen or C-R₅, where R₅ represents hydrogen or (C₁-C₆)-alkyl;

n,m independently of one another denotes an integer between 0-3, with the proviso that in the case n = 0, X denotes a CR₅R₆ group where R₅ and R₆ independently of one another represent hydrogen or (C₁-C₆)-alkyl and that the nitrogen atom adjacent to the C=Z group is substituted by a hydrogen atom or a (C-C₆)-alkyl group;

R₄ is a straight-chain or branched (C₁-C₂₀)-alkyl radical which can [**may**] be saturated or unsaturated, with one to three double and/or triple bonds, and which can [**may**] be unsubstituted or can [**may**] optionally be substituted at the same or different C atoms by one, two or more aryl, heteroaryl, halogen, cyano, (C₁-C₆)-alkoxycarbonylamino, (C₁-C₆)-alkoxy, amino, mono-(C₁-C₄)-alkylamino or di-(C₁-C₄)-alkylamino; a (C₆-C₁₄)-aryl radical, (C₆-C₁₄)-aryl-(C₁-C₄)-alkyl radical or a (C₂-C₁₀)-heteroaryl or (C₂-C₁₀)-heteroaryl-(C₁-C₄)-alkyl radical which contains one or more heteroatoms selected from the group consisting of N, O and S, where the (C₁-C₄)-alkyl radical can be unsubstituted or mono- or polysubstituted by identical or different substituents from the group consisting of (C₁-C₆)-alkyl, halogen and oxo (=O) and where the (C₆-C₁₄)-aryl or (C₂-C₁₀)-heteroaryl radical can be unsubstituted or mono- or polysubstituted by identical or different substituents from the group consisting of straight-chain or branched

(C₁-C₈)-alkyl, (C₃-C₇)-cycloalkyl, halogen, cyano, (C₁-C₆)-alkoxycarbonylamino, (C₁-C₆)-alkoxy, carboxyl, (C₁-C₈)-alkoxycarbonyl, straight-chain or branched (C₁-C₆)-alkyl which is substituted by one or more fluorine atoms, [**preferably trifluoromethyl,**] hydroxyl, straight-chain or branched (C₁-C₈)-alkoxy, [**preferably methoxy or ethoxy,**] where adjacent oxygen atoms can [**may**] also be linked by (C₁-C₂)-alkylene groups, [**preferably by a methylene group**] benzyloxy, nitro, amino, mono-(C₁-C₄)-alkylamino, di-(C₁-C₄)-alkylamino, aryl, which [**for its part**] can be unsubstituted or mono- or polysubstituted by identical or different substituents from the group consisting of straight-chain or branched (C₁-C₈)-alkyl, (C₃-C₇)-cycloalkyl, carboxyl, straight-chain or branched (C₁-C₈)-alkoxycarbonyl, by trifluoromethyl, hydroxyl, straight-chain or branched (C₁-C₈)-alkoxy, [**preferably methoxy or ethoxy,**] benzyloxy, nitro, amino, mono-(C₁-C₄)-alkylamino, di-(C₁-C₄)-alkylamino, cyano, straight-chain or branched cyano-(C₁-C₆)-alkyl;

and their structural isomers and stereoisomers, [**in particular tautomers, diastereomers and enantiomers**] and their pharmaceutically acceptable salts [**in particular acid addition salts**].